



- 1. What is the definition of selective toxicity?
- a) The ability of an agent to kill host cells without harming microorganisms
- b) The ability of an agent to injure or kill invading microorganisms without harming host cells
- c) The ability of an agent to kill both microorganisms and host cells
- d) The ability of an agent to harm host cells without killing microorganisms
- 2. What factors need to be considered when selecting an antimicrobial agent?
- a) The cost of therapy and patient factors
- b) The cost of therapy and the site of the infection
- c) The organism's identity and the site of the infection
- d) The organism's susceptibility to a particular agent and the site of the infection
- 3. What is the purpose of a Gram stain?
- a) To determine the presence of microorganisms in sterile body fluids
- b) To diagnose the infection
- c) To determine the antibiotic susceptibility
- d) To identify the morphologic features of microorganisms
- 4. What is empiric therapy?
- a) Immediate treatment for critically ill patients
- b) Treatment based on the clinical picture and site of infection
- c) Treatment with broad-spectrum therapy
- d) Treatment for gram-positive cocci in the spinal fluid





- 5. What is the difference between bacteriostatic and bactericidal?
- a) Bacteriostatic kills bacteria, while bactericidal arrests the growth/replication of microorganisms
- b) Bacteriostatic arrests the growth/replication of microorganisms, while bactericidal kills bacteria
- c) Bacteriostatic and bactericidal have the same meaning
- d) Bacteriostatic kills microorganisms, while bactericidal harms host cells
- 6. What is the purpose of determining the minimum inhibitory concentration (MIC)?
- a) To predict the susceptibility of a microorganism to a drug
- b) To experimentally determine the susceptibility of a microorganism to a drug
- c) To determine the efficacy of a drug for clinical infections
- d) To determine the safety of a drug for host cells
- 7. Which of the following is true about predicting antimicrobial susceptibility?
- a) It is always predictable and can be determined through MIC and MBC
- b) It is always unpredictable and cannot be determined through MIC and MBC
- c) It can be both predictable and unpredictable, depending on the microorganism and drug
- d) It can only be determined through minimum bactericidal concentration (MBC)
- 8. What is the key concept behind identifying the infecting organism?
- a) Determining the gram stain and morphologic features of microorganisms
- b) Identifying the microbial antigens, DNA, RNA, etc.
- c) Understanding the host immune markers
- d) Finding the presence of microorganisms in sterile body fluids





- 9. What is the purpose of empirically treating an infection?
- a) To immediately treat critically ill patients
- b) To select a drug based on the site of infection and clinical picture
- c) To treat infections caused by gram-positive cocci
- d) To treat infections caused by S. pneumoniae
- 10. What is the major cause of death before the discovery of antibiotics?
- a) Non-communicable diseases
- b) Communicable diseases
- c) Antibiotic resistance
- d) Susceptibility to infections





Answer Key:

- 1. b) The ability of an agent to injure or kill invading microorganisms without harming host cells
- 2. c) The organism's identity and the site of the infection
- 3. a) To determine the presence of microorganisms in sterile body fluids
- 4. b) Treatment based on the clinical picture and site of infection
- 5. b) Bacteriostatic arrests the growth/ replication of microorganisms, while bactericidal kills bacteria
- 6. a) To predict the susceptibility of a microorganism to a drug
- 7. c) It can be both predictable and unpredictable, depending on the microorganism and drug
- 8. b) Identifying the microbial antigens, DNA, RNA, etc.
- 9. b) To select a drug based on the site of infection and clinical picture
- 10. b) Communicable diseases

